

WHAT IS CLAIMED IS:

1. A process for forming a nonwoven web comprising the steps of:

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melt spinning multicomponent filaments, said filaments comprising a first polymeric component and a second polymeric component, said first polymeric component having a faster solidification rate than said second polymeric component, said second polymeric component containing a butylene-propylene copolymer;

drawing said multicomponent filaments; naturally crimping said multicomponent filaments; and

thereafter forming said multicomponent filaments into a nonwoven web.

2. A process as defined in claim 1, wherein said second polymeric component comprises polyethylene.

3. A process as defined in claim 1, wherein said butylene-propylene copolymer comprises a random copolymer containing up to about 20% by weight butylene.

4. A process as defined in claim 1, wherein said butylene-propylene copolymer is added to said second polymeric component in an amount up to about 10 percent by weight.

5. A process as defined in claim 1, wherein said butylene-propylene copolymer is added to said second polymeric component in an amount from about 0.5% to about 5% by weight.

6. A process as defined in claim 2, wherein said first polymeric component comprises polypropylene.

7. A process as defined in claim 2, wherein said first polymeric component comprises a material selected from the group consisting of nylon, polyester and propylene-ethylene copolymers.

8. A process as defined in claim 1, wherein said second polymeric component further comprises reclaimed polymers, said reclaimed polymers comprising polypropylene, polyethylene or copolymers of propylene and ethylene.

9. A process as defined in claim 1, wherein said multicomponent filaments have a linear density of less than about 2 denier.

10. A process for forming a nonwoven web comprising the steps of:

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melt spinning bicomponent filaments, said bicomponent filaments comprising a first polymeric component and a second polymeric component, said first polymeric component comprising polypropylene, said second polymeric component comprising a mixture of polyethylene and a butylene-propylene copolymer;

drawing said bicomponent filaments; crimping said bicomponent filaments; and thereafter forming said bicomponent filaments into a nonwoven web.

11. A process as defined in claim 10, wherein said bicomponent filaments are crimped by subjecting said filaments to a flow of a gas.

12. A process as defined in claim 10, wherein said butylene-propylene copolymer is present in said second polymeric component in an amount from about 0.5% to about 5% by weight.

13. A process as defined in claim 12, wherein said butylene-propylene copolymer comprises a random copolymer containing about 14% by weight butylene.

14. A process as defined in claim 10, wherein said second polymeric component further comprises reclaimed polymers, said reclaimed polymers comprising polypropylene, polyethylene or copolymers of propylene and ethylene.

15. A process as defined in claim 14, wherein said reclaimed polymers are present in said second polymeric component in an amount up to about 20% by weight.

16. A process as defined in claim 10, wherein said bicomponent filaments have a linear density of less than about 2 denier.

17. A process as defined in claim 10, wherein said crimped bicomponent filaments contain at least 10 crimps per inch.

18. A nonwoven web comprising spunbond multicomponent crimped filaments, said multicomponent crimped filaments being made from at least a first polymeric component and a second polymeric component, said first polymeric component having a faster solidification rate than said second polymeric component, said second polymeric component containing a butylene-propylene random copolymer.

19. A nonwoven web as defined in claim 18, wherein said second polymeric component comprises polyethylene.

20. A nonwoven web as defined in claim 19, wherein said butylene-propylene random copolymer is present within said second polymeric component in an amount up to about 5% by weight.

21. A nonwoven web as defined in claim 20, wherein said first polymeric component comprises polypropylene.

22. A nonwoven web as defined in claim 21, wherein said butylene-propylene random copolymer contains up to about 20% by weight butylene.

23. A nonwoven web as defined in claim 22, wherein said multicomponent crimped filaments have a linear density of less than about 2 denier.

24. A naturally crimped bicomponent filament comprising at least a first polymeric component and

a second polymeric component, said first polymeric component having a faster solidification rate than said second polymeric component, said filament containing a crimp enhancement additive, said crimp enhancement additive being added in an amount sufficient for said filament to have at least 10 crimps per inch, said multicomponent filament having a linear density of less than about 2 denier.

25. A naturally crimped multicomponent filament as defined in claim 24, wherein said filament has a linear density of less than about 1.2 denier.

26. A naturally crimped multicomponent filament as defined in claim 24, wherein said second polymeric component comprises polyethylene and wherein said crimp enhancement additive comprises a butylene-propylene random copolymer and is contained within said second polymeric component.

27. A naturally crimped multicomponent filament as defined in claim 26, wherein said first polymeric component comprises polypropylene.

28. A process for improving the unbonded strength of a spunbond nonwoven web, said process comprising the steps of:

incorporating into a first polymeric component a butylene-propylene copolymer;
melt spinning multicomponent filaments from said first polymeric component and at least a second polymeric component;

drawing said multicomponent filaments;

and

thereafter forming said multicomponent filaments into a nonwoven web wherein said butylene-propylene copolymer is present in said web

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29. A process as defined in claim 28, wherein said butylene-propylene copolymer is added to said first polymeric component in an amount from about 0.5% to about 5% by weight.